

AMENDMENTS TO THE CLAIMS

1-8. (Canceled)

9. (Currently Amended) A vehicle mounted control apparatus comprising:

a switch accessible by a driver of a vehicle, the switch being actuated by the driver to select executing a command execution mode;

a voice command receiver inside the vehicle that receives a voice command input when the command execution mode is executed;

a voice recognition section operably connected to the voice command input device for recognizing the voice command input by the voice receiver;

a user interface on an interior surface of the vehicle, the user interface being actuated by a nonverbal input by the driver to select executing an operation guidance mode, the user interface including a display device that provides visual operation guidance to the driver regarding the command execution mode when the operation guidance mode is executed;

a control section operably connected to the switch and the user interface, the control section executing the command execution mode in response to the driver actuating the switch, the control section executing the operation guidance mode in response to the driver actuating the user interface by the nonverbal input,

wherein, when the voice command cannot be recognized by the voice recognition section,
the control section performs the following: analyzes

_____ determines a cause of incapability of recognition of the voice command, ~~when the voice command cannot be recognized by the voice recognition section~~ and gives

_____ causes the display device to display a visual notice indicating to the driver on the determined cause of the incapability of recognition as a result of the driver visually recognizing the visual notice as representing a particular one of a plurality of distinct causes of incapability of recognition; analysis via the display device; and

a command execution section that executes the voice command when the voice command is recognized by the voice recognition section.

10. (Currently Amended) The vehicle mounted control apparatus as claimed in claim 9, wherein said visual notice is ~~performed~~ displayed by a change of a display format on the display device.

11. (Currently Amended) A vehicle mounted control apparatus comprising:

a switch accessible by a driver of a vehicle, the switch being actuated by the driver to select executing a processing of command execution mode;

a voice command receiver inside the vehicle that receives a voice command input when the command execution mode is executed;

a voice recognition section operably connected to the voice command receiver for recognizing the voice command input by the voice receiver;

a user interface on an interior surface of the vehicle, the user interface being actuated by the driver to select executing an operation guidance mode, the user interface including a display device that provides visual operation guidance to the driver regarding the command execution mode when the operation guidance mode is executed;

a control section operably connected to the switch and the user interface, the control section executing the command execution mode in response to the driver actuating the switch, the control section executing the operation guidance mode in response to the driver actuating the user interface,

wherein the control section performs an analysis to determine a particular cause of incapability of recognition of the voice command when the voice command cannot be recognized by the voice recognition section; and

a storage section that stores a correspondence between different display formats and different causes of incapability of recognition by the voice recognition section, respectively, such that each of the display formats corresponds to a respective one of the different causes according to the stored correspondence.

wherein the control section reads the display format corresponding to the particular cause determined by the result of analysis from the storage section and ~~gives~~ causes the display device

to display a visual notice of indicating to the driver the particular cause by changing a screen of
the display device to exhibit the read display format.

12. (Original) The vehicle mounted control apparatus as claimed in claim 10, wherein the display format is a display format of an icon displayed on the screen.

13. (Original) The vehicle mounted control apparatus as claimed in claim 11, wherein the display format is a display format of an icon displayed on the screen.

14. (Original) The vehicle mounted control apparatus as claimed in claim 12, wherein the display format of the icon is a color of the icon displayed on the screen.

15. (Original) The vehicle mounted control apparatus as claimed in claim 13 wherein the display format of the icon is a color of the icon displayed on the screen.

16. (Currently Amended) ~~A—The vehicle mounted control apparatus of claim 11, comprising:~~

~~a switch accessible by a driver of a vehicle, the switch being actuated by the driver to select executing a processing of command execution mode;~~

~~a voice command receiver inside the vehicle that receives a voice command input when the command execution mode is executed;~~

~~a voice recognition section operably connected to the voice command receiver for recognizing the voice command input by the voice command receiver;~~

~~a user interface on an interior surface of the vehicle, the user interface being actuated by a nonverbal input by the driver to select executing an operation guidance mode, the user interface including a display device that provides visual operation guidance to the driver regarding the command execution mode when the operation guidance mode is executed; and~~

~~a control section operably connected to the switch and the user interface, the control section executing the command execution mode in response to the driver actuating the switch,~~

~~the control section executing the operation guidance mode in response to the driver actuating the user interface by the nonverbal input,~~

~~wherein the control section analyzes a cause of incapability of recognition of the voice command when the voice command cannot be recognized by the voice recognition section and gives a visual notice on the result of the analysis via the display device,~~

wherein the control section displays a sample of a voice command on a screen of the display device when the operation guidance is executed, the sample corresponding to the voice command to be input when the command execution mode is executed.

17. (Canceled)

18. (Previously Presented) The vehicle mounted control apparatus as claimed in claim 9, wherein:

the display device operates as an operation guide that displays a menu providing guidance on operation and guidance on a selected operation when the control section executes the operation guidance mode.

19. (Previously Presented) The vehicle mounted control apparatus as claimed in claim 11, wherein:

the display device operates as an operation guide that displays a menu providing guidance on operation and guidance on a selected operation when the control section executes the operation guidance mode.

20. (Previously Presented) The vehicle mounted control apparatus as claimed in claim 16, wherein:

the display device operates as an operation guide that displays a menu providing guidance on operation and guidance on a selected operation when the control section executes the operation guidance mode.

21. (New) A method implemented by a vehicle mounted apparatus which includes a switch accessible by a driver of a vehicle, a voice command receiver inside the vehicle, a user interface including a display device on the interior surface of the vehicle, the method comprising:
utilizing one or more microprocessors to perform the following:

executing a command execution mode in response to the switch being actuated by the driver;

performing voice recognition on a voice command which is received by the voice command receiver when the command execution mode is executed;

if the voice command cannot be recognized by the voice recognition,

performing an analysis determining a particular cause of incapability of recognition of the voice command, and

causing the display device to display a visual notice indicating to the driver the determined cause of the incapability of recognition on the result of the analysis as a result of the driver visually recognizing the visual notice as representing a particular one of a plurality of candidate causes of incapability of recognition; and

if the voice command is recognized by the voice recognition, executing the voice command;

executing an operation guidance mode in response to the user interface being actuated by the driver by a nonverbal input; and

causing the display device to display visual operation guidance to the driver regarding the command execution mode when the operation guidance mode is executed.

22. (New) The method of claim 21, wherein:

the vehicle mounted apparatus includes a memory device which stores a correspondence between different display formats and different causes of incapability of recognition by the voice recognition section, respectively, such that each of the stored display formats corresponds to a respective one of the different causes according to the stored correspondence, and

the method further comprises utilizing the one or more microprocessors to perform the following if the voice command cannot be recognized by the voice recognition:

read the display format corresponding to the particular cause determined by the result of analysis from the memory device; and

cause the display device to display the visual notice of the particular cause by changing a screen of the display device to exhibit the read display format.

23. (New) The method of claim 21, wherein the visual notice is displayed by changing a display format on a display device of the user interface.

24. (New) The method of claim 23, wherein the display format is a display format of an icon displayed on the screen.

25. (New) The method of claim 23, wherein the display format of the icon is a color of the icon displayed on the screen.

26. (New) The method of claim 21, the method further comprising utilizing the one or more microprocessors to:

display a sample of a voice command on a screen of the display device when the operation guidance is executed, the sample corresponding to the voice command to be input when the command execution mode is executed.

27. (New) The method of claim 21, the method further comprising utilizing the one or more microprocessors to:

causing the display device to display a menu providing guidance on operation and guidance on a selected operation when the control section executes the operation guidance mode.

28. (New) The vehicle mounted control apparatus of claim 9, wherein:
the plurality of distinct causes of incapability of recognition comprise:

sound level is too high;

sound level is too low;

uttering speed is too fast; and

uttering speed is too slow, and

the apparatus includes a memory device storing a different type of visual notice in association with each of the plurality of distinct causes of incapability of recognition, and

when the voice command cannot be recognized by the voice recognition section, the control section performs the following:

reads the distinct type of visual notice stored in association with the determined cause of incapability of recognition from the memory device; and

causes the display device to display the distinct type of visual notice.

29. (New) The vehicle mounted control apparatus of claim 11, wherein:

the different causes of incapability of recognition of the stored correspondence comprise:

sound level is too high;

sound level is too low;

uttering speed is too fast; and

uttering speed is too slow.